

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1 (Currently Amended). A compound comprising a plurality of linked nucleosides, wherein:

each nucleoside includes a pentofuranosyl sugar portion and a base portion; and

at least one of said nucleosides bears at a 2'-O-position, a 3'-O-position, or a 5'-O-position

a terminal substituent having formula:



where:

$R_A$  is alkyl having from 1 to about 10 carbon atoms or  $(CH_2-CH_2-Q)_x$ ;

$R_{1a}$  and  $R_{1b}$ , independently, are H,  $R_2$ , or an amine protecting group or have formula  $C(X)-R_2$ ,  $C(X)-R_A-R_2$ ,  $C(X)-Q-R_A-R_2$ ,  $C(X)-Q-R_2$ ; and

$R_2$  is a folate, a steroid molecule, a reporter molecule, a lipophilic molecule, a reporter enzyme, a peptide, a protein, or has formula  $-Q-(CH_2CH_2-Q)_x-R_3$ ;

X is O or S;

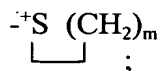
each Q is, independently, is NH, O, or S;

x is about 1 to about 50;

$R_3$  is H,  $R_A$ ,  $C(O)OH$ ,  $C(O)OR_A$ ,  $C(O)R_4$ ,  $R_A-N_3$ , or  $R_A-NH_2$ ;

$R_4$  is Cl, Br, I,  $SO_2R_5$  or has structure:





m is 2 to 7; and

R<sub>5</sub> alkyl having 1 to about 10 carbon atoms.

2 (Original). The compound of claim 1 wherein more than one of said nucleosides bear said substituent at a 2'-O-position, a 3'-O-position, or a 5'-O-position.

3 (Original). The compound of claim 1 wherein R<sub>A</sub> is (CH<sub>2</sub>)<sub>n</sub> where n is an integer from 1 to about 10.

4 (Original). The compound of claim 3 wherein n is 6.

5 (Original). The compound of claim 1 wherein said R<sub>1a</sub> is H and R<sub>1b</sub>, together, are phthalimido.

6 (Original). The compound of claim 1 wherein R<sub>1a</sub> is H and R<sub>1b</sub> is C(O)-(CH<sub>2</sub>)<sub>n</sub>-R<sub>2</sub> where n is an integer from 1 to about 10.

7 (Original). The compound of claim 1 wherein R<sub>1a</sub> is H and R<sub>1b</sub> is R<sub>2</sub>.

8 (Original). The compound of claim 1 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(O)-O-R_2$ .

9 (Original). The compound of claim 1 wherein  $R_{1a}$  and  $R_{1b}$  both are alkyl.

10 (Original). The compound of claim 1 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(O)-(CH_2)_n-R_2$  where n is an integer from 1 to about 10.

11 (Original). The compound of claim 10 wherein  $R_2$  has formula  $-(CH_2)_5-NH-$ .

12 (Original). The compound of claim 1 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(S)-NH-R_2$ .

13 (Original). The compound of claim 1 wherein  $R_2$  includes pyrene, fluorescein, dinitrophenyl, cholesterol, acridine.

14 (Original). The compound of claim 1 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(O)-R_2$ .

15 (Original). The compound of claim 14 wherein  $R_2$  has formula  $-O-(CH_2CH_2-O)_x-R_3$ .

16 (Currently Amended). A nucleoside comprising a pentofuranosyl sugar portion and a base portion, wherein said nucleoside bears at a 2'-O-position, a 3'-O-position, or a 5'-O-position a substituent having the formula:



where:

$R_A$  is alkyl having from 1 to about 10 carbon atoms;

$R_{1a}$  and  $R_{1b}$ , independently, are H,  $R_2$ , or an amine protecting group or have formula  $C(X)-R_2$ ,  $C(X)-R_A-R_2$ ,  $C(X)-Q-R_A-R_2$ ,  $C(X)-Q-R_2$ ; and

$R_2$  is a steroid molecule, a reporter molecule, a lipophilic molecule, a reporter enzyme, a peptide, a protein, or has formula  $-Q-(CH_2CH_2-Q)_x-R_3$ ;

X is O or S;

each Q is, independently, is NH, O, or S;

x is about 1 to about 50;

$R_3$  is H,  $R_A$ ,  $C(O)OH$ ,  $C(O)OR_A$ ,  $C(O)R_4$ ,  $R_A-N_3$ , or  $R_A-NH_2$ ; and

$R_4$  is Cl, Br, I,  $SO_2R_5$  or has structure:



m is 2 to 7; and

$R_5$  alkyl having 1 to about 10 carbon atoms.

17 (Currently Amended). The nucleoside of claim 16 wherein  $R_A$  is  $(CH_2)_n$  where  $n$  is an integer from 1 to about 10.

18 (Currently Amended). The nucleoside of claim 16 wherein  $n$  is 6.

19 (Currently Amended). The nucleoside of claim 16 wherein said  $R_{1a}$  is H and  $R_{1b}$ , together are phthalamido.

20 (Currently Amended). The nucleoside of claim 16 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(O)-(CH_2)_n-R_2$  where  $n$  is an integer from 1 to about 10.

21 (Currently Amended). The nucleoside of claim 16 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $R_2$ .

22 (Currently Amended). The nucleoside of claim 16 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(O)-O-R_2$ .

23 (Currently Amended). The nucleoside of claim 16 wherein  $R_{1a}$  and  $R_{1b}$  both are alkyl.

24 (Currently Amended). The nucleoside of claim 16 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(O)-(CH_2)_n-R_2$  where n is an integer from 1 to about 10.

25 (Currently Amended). The nucleoside of claim 24 wherein  $R_2$  has formula  $-(CH_2)_5-NH-$ .

26 (Currently Amended). The nucleoside of claim 16 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(S)-NH-R_2$ .

27 (Currently Amended). The nucleoside of claim 16 wherein  $R_2$  includes pyrene, fluorescein, dinitrophenyl, cholesterol, acridine.

28 (Currently Amended). The nucleoside of claim 16 wherein  $R_{1a}$  is H and  $R_{1b}$  is  $C(O)-R_2$ .

29 (Currently Amended). The nucleoside of claim 28 wherein  $R_2$  has formula  $-O-(CH_2CH_2-O)_x-R_3$ .

Claims 30-35 (Canceled).